

## CLAIMS:

1. A method for determining expected accumulated return and associated risk of an investment having an investment term, the investment term comprised of a plurality of periods, the method comprising:
  - 5 calculating an expected annualised asset return distribution for an asset over different holding periods of different length;  
sampling the expected annualised asset return distribution for the holding period substantially equal to the investment term to extract a single expected return on initial capital of the investment;
  - 10 for expected returns generated in each period, sampling the expected annualised asset return distribution for a holding period substantially equal to the total of the remaining periods of the investment term to extract a single expected return on each return previously generated;  
summing each of the sampling extractions and storing the result representing a  
15 single expected return for the investment;  
repeating each of the sampling and summing steps; and  
determining the expected accumulated return and associated risk of the investment using the results.
2. A method according to claim 1, wherein the investment term is equal to the  
20 investment life of the investment.
3. A method according to claim 1 or 2, wherein each period is equal in length.
4. A method according to claim 3, wherein each period is a year in length.
5. A method according to any one of the preceding claims, wherein the first holding period of the different holding periods is equal to the investment term.
- 25 6. A method according to claim 5, wherein different holding periods are each holding period progressively smaller than the first holding period by a period.
7. A method according to any one of the preceding claims, wherein the calculated asset return distributions is based on the observed past performance of the asset.
8. A method according to any one of the preceding claims, wherein the determined  
30 expected accumulated return of the portfolio is used to calculate expected accumulated wealth distribution of the investment.
9. A method according to any one of the preceding claims, wherein sampling the expected annualised asset return distribution for a holding period comprises sampling the expected annualised asset return distribution a number of times equal to the number  
35 of periods within that holding period.

10. A method according to any one of the preceding claims, wherein the investment is a superannuation investment or an investment in a managed fund.

11. A method according to any one of the preceding claims, wherein the method further comprises also determining the expected accumulated return and associated risk  
5 of an investment over a smaller investment term also comprised of periods by performing the sampling, summing, repeating and determining steps of the method using a smaller investment term as the investment term.

12. A method according to claim 11, wherein the expected return and associated risk of an investment is determined for each smaller investment term within the investment  
10 term, starting from a first smaller investment term substantially equal to a single period, then each term progressively larger than the first smaller investment term by a period.

13. A method according to any one of the preceding claims, wherein the investment includes capital contributions made for any period within the investment term.

14. A method according to claim 13, wherein the method further comprises for each  
15 contribution made in a period, sampling the expected annualised asset return distribution for a holding period substantially equal to the total of the remaining periods of the investment term to extract a single expected return on each contribution.

15. A method according to claim 13 or 14, wherein the expected return generated in a period is the total of the expected returns generated in that period from the initial  
20 capital and the expected returns generated in that same period from any returns previously generated.

16. A method according to claim 13, 14 or 16, wherein the expected returns generated in a period also includes the expected returns generated in that same period from contributions made.

17. A method according to any one of the preceding claims, wherein the investment is comprised of one or more assets and proportions of the investment divided into the different assets represent a strategic asset allocation of the investment wherein the step of calculating expected annualised asset return distribution for an asset is performed for each asset that is included in the strategic asset allocation of the investment.  
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18. A method according to claim 17, wherein after extracting a single expected return on initial capital for each asset, the method further comprises combining the expected returns for each asset according to each asset's weight allocation within the strategic asset allocation to calculate a single expected return on initial capital of the investment for that strategic asset allocation.  
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19. A method according to any one of the preceding claims, wherein the investment has more than one asset, after extracting a single expected asset return on each  
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previously generated return for each asset, the method further comprises combining the expected return on each previously generated return of each asset according to each asset's weight allocation within the strategic asset allocation to calculate a single expected return on each return previously generated for that strategic asset allocation.

5 20. A method according to any one of the preceding claims, wherein the method is repeated based on different strategic asset allocations for the investment.

21. A method according to claim 20, wherein an actual strategic asset allocation for the investment is chosen for the investor by comparing the expected accumulated return and wealth and associated risk of an investment as determined for each strategic asset  
10 allocation.

22. A method according to any one of the preceding claims wherein the asset return distribution is derived from standard market indices or a subset of standard indices selected on the basis of parameters such a price to book value, sectoral bias or other 'active' tilts.

15 23. A method according to any one of the preceding claims wherein the step of using the results to determine the expected accumulated wealth and associated risk of an investment comprises graphically representing the results, such as

24. A method according to any one of the preceding claims wherein the associated risk of an investment is determined based on the spread of expected wealth determined  
20 by the method.

25. A method according to any one of the preceding claims wherein the step of calculating a distribution of expected annualised asset returns for an asset over different holding periods of different length comprises:

calculating an expected annualised return for an asset derived from an estimated  
25 risk premium for that asset;

calculating a representative annualised return distribution for an asset over the different holding periods;

for each representative annualised return distribution, calculating the likelihood of degrees of variation from a central tendency; and

30 combining the expected annualised return for the asset and the variations calculated for each holding periods into the distribution of expected annualised asset returns for holding period.

26. A method according to any one of the preceding claims wherein the method further comprises collecting details on the investor and determining the strategic asset  
35 allocation for an investment based on the details of the investor.

27. A method according to claim 26 wherein the investor details are any one or more of the investor's age, expected membership duration, income, current investment capital with the fund, contributions amount, prospective capital additions and withdrawals, wealth objectives, risk tolerance for expected wealth, other major  
5 investments, taxation and other special circumstances.
28. A method according to any one of the preceding claims wherein the method further comprises periodically recalculating the expected annualised return distributions.
29. A method according to any one of the preceding claims wherein the method  
10 further comprises determining the strategic asset allocation by selecting a first asset, then selecting one or more other assets that most exploits the relationship between return and risk of the investment to the investor's advantage.
30. A method according to any one of the preceding claims wherein the method further comprises determining a strategic asset allocation for an investment fund having  
15 a plurality of investments, by:
- determining a strategic asset allocation for each of the plurality of investments according to the method described above; and
  - determining a strategic asset allocation for the fund using an aggregate of the strategic asset allocation for each of the plurality of investments.
- 20 31. A method according to the preceding claims wherein the method further comprises allowing the investor to amend their strategic asset allocation.
32. A method according to any one of the preceding claims further comprising allowing the investor to amend contributions or capital additions.
33. A computer system to determine expected accumulated return and associated  
25 risk of an investment over an investment term according to the method described in any one of the preceding claims.
34. A computer system according to claim 33 wherein an asset datastore stores the expected annualised asset return distribution, a sample datastore to store a sum of each repeat of the sampling extractions and a processor to operate to perform the sampling  
30 steps of the method and to use the sample datastore to determine the expected return and associated risk of the investment.